11

Referring now to FIG. 3, a flow diagram 300 depicting an exemplary method for producing made-to-order designs on the surface of an extraterrestrial body is shown. As shown in FIG. 3, the method begins with providing a device on the surface of the extraterrestrial body, as shown at step 302. As 5 discussed above, the device includes a surface altering tool, and preferably includes a motorized transport vehicle. The device may be transported from Earth using known techniques.

The method further includes receiving a request to create a 10 design on the surface of an extraterrestrial body, such as the Earth's moon, as shown at step 304. This step is preferably performed on Earth, and in a preferred embodiment involves receipt of appropriate data signals at a server or other computerized system via a communications network such as the 15 internet. The request, and the design, may have any suitable form. By way of example, the request may be to create a textual design, such as a name or phrase. A more elaborate request might require the individual to provide data—e.g., the result of a three dimensional scan—that would permit the 20 surface altering tool to recreate a three-dimensional image, such as a face, foot print, etc. By way of example, such data may be provided by transmitting a suitable data file via the communications network.

Next, the method involves transmitting to the device 150 a 25 control signal that will cause the device to create the design, as shown at step 306. Preferably, the control signal is created by the service provider's 106 system 108, and then transmitted to the device 150 via the communication station 120. By way of example, the control signal may provide instructions 30 for controlling the surface altering tool and/or the transport vehicle 190.

The receipt of the control signal at the device 150 causes the control module 200 to control the surface altering tool extraterrestrial body, e.g., by causing the vehicle 190 to traverse the surface, by operating the articulatable arm, or by configuring tread of a configurable-tread rover wheel and causing the vehicle to traverse the surface to impart impressions corresponding to the tread configuration.

The method further involves determining whether a request for merchandise has been received, as shown at step 308. For example, this request for merchandise may have been part of or associated with the request received in step **304**. If not, then in this exemplary embodiment, the method 45 ends, as shown at steps 308 and 316.

If it is determined in step 308 that a merchandise request has been received, then the system receives from the device an image signal showing an image of the design created on the ment other types of information may be received additionally, or alternatively.

This signal is transmitted from the device 150, and is received on Earth via the communication station 120, and ultimately by the service provider's system 108. The method 55 then involves creating of the requested merchandise bearing the image, and sending the merchandise to a recipient, as shown at steps 312 and 314. The recipient may or may not be the same as the requesting entity. Further, the merchandise may be manufactured by the service provider, or the service 60 provider may outsource such manufacture to an independent party. It should be noted that the merchandise may be an intangible object, such as an electronic data file, such as an \*.jpg electronic image file, and that such an object may be sent to the recipient by electronically transmitting the file via 65 a communications network. Alternatively, the merchandise may be a tangible (physical) object, such as a coffee mug

12

bearing an image of the design as it exists on the surface of the extraterrestrial body, and that such an object may be sent to the recipient by transport vehicle (vehicle 11, FIG. 1) or other means. By way of further example, the requested merchandise may be a three-dimensional reproduction of the design as it exists on the surface of the extraterrestrial body.

Thus, the present invention provides a method for satisfying demand for unique gifts, memorials, trophies, awards, prizes, commemorations, and such, by creating, potentially very long-lived designs, e.g. including messages, on the surface of an extraterrestrial body using a device deployable on the surface of an extraterrestrial body outfitted with one or more means for altering the surface of the extraterrestrial body, such as wheels with on-the-fly reconfigurable tread heads, so as to implement a desired design on the surface in accordance with an entity's instructions. The device is outfitted with cameras and other sensors to collect data about the created design and a communication system to transmit the data back to Earth. The transmitted data, along with any additional data supplied by the ordering entity, is used to produce merchandise incorporating recordings of the collected data, hard copy images, or combinations of images and text, and reproductions of the implemented design to be delivered per the entity's instructions.

While there have been described herein the principles of the invention, it is to be understood by those skilled in the art that this description is made only by way of example and not as a limitation to the scope of the invention. Accordingly, it is intended by the appended claims, to cover all modification of the invention which fall within the true spirit and scope of the invention.

What is claimed is:

40

- 1. A method for producing made-to-order designs on a 160a, 160b to create the requested design on the surface of the 35 surface of an extraterrestrial planetary body, the method com
  - receiving from an entity a request to create a design on the surface of the extraterrestrial planetary body;
  - transmitting a control signal to a land-based vehicle on the extraterrestrial planetary body, the control signal causing the vehicle to create the design;
  - receiving on Earth an image signal sent from the vehicle, the image signal providing an image of the design created on the surface of the extraterrestrial planetary body.
  - 2. The method of claim 1, further comprising: receiving a request for merchandise bearing the image; creating merchandise bearing the image; and sending the merchandise to a recipient.
- 3. The method of claim 2, wherein said requested merchansurface of the body, as shown at step 310. In other embodi- 50 dise comprises an electronic image file, and wherein said sending comprises transmitting said electronic image file via a communications network.
  - 4. The method of claim 2, wherein said recipient is not said entity.
  - 5. The method of claim 2, wherein said requested merchandise comprises a physical object, and wherein said creating comprises producing said image on said physical object.
  - 6. The method of claim 2, wherein creating merchandise bearing the image comprise creating a three-dimensional reproduction of the design as it exists on the surface of the extraterrestrial body.
  - 7. The method of claim 1, wherein receiving the request comprises receiving a data signal via a communications network.
  - 8. The method of claim 7, wherein the data signal is selected from a group consisting of a telephone call, a facsimile transmission, a communication from a smart phone